CLASSIFICATION AND TAGGING RULES FOR SWITCHING NODES

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ABSTRACT OF THE DISCLOSURE

A VLAN classification and tagging system for a switching
node. During VLAN classification, an inbound packet is assigned
to a VLAN in accordance with a classification mode selectable
10   from a PASS, FORCE, and PROTOCOL modes. In PASS mode, the packet
is assigned to a VLAN associated with a VLAN ID from the packet.
In FORCE mode, the packet is assigned to a VLAN associated with
an ingress port. In PROTOCOL mode, the packet is assigned to a
VLAN associated with a protocol type of the packet. During VLAN
15   tagging, a VLAN identifier in an outbound packet is modified or
not in accordance with a tagging mode selectable from a PASS,
FORCE, and REMOVE modes. In PASS mode, the VLAN ID in the packet
is retained as received. In FORCE mode, the VLAN ID in the
20   packet is replaced with a VLAN ID to which the packet was
classified at inbound. In REMOVE mode, the VLAN ID from the
packet is removed without substitution.

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